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Attorneys for Debtor  
City of Stockton

UNITED STATES BANKRUPTCY COURT  
EASTERN DISTRICT OF CALIFORNIA  
SACRAMENTO DIVISION

In re:  
CITY OF STOCKTON, CALIFORNIA,  
Debtor.

Case No. 2012-32118

D.C. No. OHS-15

Chapter 9

WELLS FARGO BANK, NATIONAL  
ASSOCIATION, FRANKLIN HIGH  
YIELD TAX-FREE INCOME FUND,  
AND FRANKLIN CALIFORNIA  
HIGH YIELD MUNICIPAL FUND,

Plaintiffs,

v.

CITY OF STOCKTON, CALIFORNIA,  
Defendant.

**EXHIBITS O THROUGH R TO THE  
DIRECT TESTIMONY  
DECLARATION OF ROBERT  
LELAND IN SUPPORT OF  
CONFIRMATION OF FIRST  
AMENDED PLAN FOR THE  
ADJUSTMENT OF DEBTS OF CITY  
OF STOCKTON, CALIFORNIA  
(NOVEMBER 15, 2013)<sup>1</sup>**

Adv. No. 2013-02315

Date: May 12, 2014  
Time: 9:30 a.m.  
Dept: Courtroom 35  
Judge: Hon. Christopher M. Klein

<sup>1</sup> While this declaration is made in support of confirmation of the Plan, out of an abundance of caution, and because the evidentiary hearing on Plan confirmation and the trial in the adversary proceeding share common issues, it is being filed in both in the main case and the adversary proceeding.

# Exhibit O



California Public Employees' Retirement System  
 Actuarial Office  
 P.O. Box 942701  
 Sacramento, CA 94229-2701  
 TTY: (916) 795-3240  
 (888) 225-7377 phone • (916) 795-2744 fax  
[www.calpers.ca.gov](http://www.calpers.ca.gov)

October 2013

**SAFETY PLAN OF THE CITY OF STOCKTON (CalPERS ID: 6373973665)  
 Annual Valuation Report as of June 30, 2012**

Dear Employer,

As an attachment to this letter, you will find a copy of the June 30, 2012 actuarial valuation report of your pension plan. Your 2012 actuarial valuation report contains important actuarial information about your pension plan at CalPERS. Your CalPERS staff actuary, whose signature appears in the Actuarial Certification Section on page 1, is available to discuss the report with you after October 31, 2013.

**Future Contribution Rates**

The exhibit below displays the Minimum Employer Contribution Rate for fiscal year 2014-15 and a projected contribution rate for 2015-16, before any cost sharing. The projected rate for 2015-16 is based on the most recent information available, including an estimate of the investment return for fiscal year 2012-13, namely 12 percent, and the impact of the new smoothing methods adopted by the CalPERS Board in April 2013 that will impact employer rates for the first time in fiscal year 2015-16. For a projection of employer rates beyond 2015-16, please refer to the "Analysis of Future Investment Return Scenarios" in the "Risk Analysis" section, which includes rate projections through 2019-20 under a variety of investment return scenarios. Please disregard any projections that we may have provided you in the past.

Fiscal Year	Employer Contribution Rate
2014-15	41.385%
2015-16	44.5% (projected)

Member contributions other than cost sharing, (whether paid by the employer or the employee) are in addition to the above rates. **The employer contribution rates in this report do not reflect any cost sharing arrangement you may have with your employees.**

The estimate for 2015-16 also assumes that there are no future contract amendments and no liability gains or losses (such as larger than expected pay increases, more retirements than expected, etc.). This is a very important assumption because these gains and losses do occur and can have a significant impact on your contribution rate. Even for the largest plans, such gains and losses often cause a change in the employer's contribution rate of one or two percent of payroll and may be even larger in some less common instances. These gains and losses cannot be predicted in advance so the projected employer contribution rates are just estimates. Your actual rate for 2015-16 will be provided in next year's report.

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SAFETY PLAN OF THE CITY OF STOCKTON  
(CalPERS ID: 6373973665)  
Annual Valuation Report as of June 30, 2012  
Page 2

### Changes since the Prior Year's Valuation

On January 1, 2013, the Public Employees' Pension Reform Act of 2013 (PEPRA) took effect. The impact of most of the PEPRA changes will first show up in the rates and the benefit provision listings of the June 30, 2013 valuation for the 2015-16 rates. For more information on PEPRA, please refer to the CalPERS website.

On April 17, 2013, the CalPERS Board of Administration approved a recommendation to change the CalPERS amortization and rate smoothing policies. Beginning with the June 30, 2013 valuations that set the 2015-16 rates, CalPERS will no longer use an actuarial value of assets and will employ an amortization and smoothing policy that will pay for all gains and losses over a fixed 30-year period with the increases or decreases in the rate spread directly over a 5-year period. The impact of this new actuarial methodology is reflected in the "Analysis of Future Investment Return Scenarios" subsection of the "Risk Analysis" section of your report.

A review of the preferred asset allocation mix for CalPERS investment portfolio will be performed in late 2013, which could influence future discount rates. In addition, CalPERS will review economic and demographic assumptions, including mortality rate improvements that are likely to increase employer contribution rates in future years. The "Analysis of Future Investment Return Scenarios" subsection does **not** reflect the impact of assumption changes that we expect will also impact future rates.

Besides the above noted changes, there may also be changes specific to your plan such as contract amendments and funding changes.

Further descriptions of general changes are included in the "Highlights and Executive Summary" section and in Appendix A, "Actuarial Methods and Assumptions." The effect of the changes on your rate is included in the "Reconciliation of Required Employer Contributions."

We understand that you might have a number of questions about these results. While we are very interested in discussing these results with your agency, in the interest of allowing us to give every public agency their results, we ask that you wait until **after** October 31 to contact us with actuarial questions. If you have other questions, you may call the Customer Contact Center at (888)-CalPERS or **(888-225-7377)**.

Sincerely,



ALAN MILLIGAN  
Chief Actuary

CTY022683



**ACTUARIAL VALUATION**

as of June 30, 2012

**for the  
SAFETY PLAN  
of the  
CITY OF STOCKTON**  
(CalPERS ID: 6373973665)

**REQUIRED CONTRIBUTIONS  
FOR FISCAL YEAR  
July 1, 2014 – June 30, 2015**

CTY022684

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## ACTUARIAL CERTIFICATION

To the best of our knowledge, this report is complete and accurate and contains sufficient information to disclose, fully and fairly, the funded condition of the SAFETY PLAN OF THE CITY OF STOCKTON. This valuation is based on the member and financial data as of June 30, 2012 provided by the various CalPERS databases and the benefits under this plan with CalPERS as of the date this report was produced. It is our opinion that the valuation has been performed in accordance with generally accepted actuarial principles, in accordance with standards of practice prescribed by the Actuarial Standards Board, and that the assumptions and methods are internally consistent and reasonable for this plan, as prescribed by the CalPERS Board of Administration according to provisions set forth in the California Public Employees' Retirement Law.

The undersigned is an actuary for CalPERS, who is a member of the American Academy of Actuaries and the Society of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.



KELLY STURM, ASA, MAAA  
Senior Pension Actuary, CalPERS

## **HIGHLIGHTS AND EXECUTIVE SUMMARY**

- **INTRODUCTION**
- **PURPOSE OF THE REPORT**
- **REQUIRED EMPLOYER CONTRIBUTION**
- **PLAN'S FUNDED STATUS**
- **COST**
- **CHANGES SINCE THE PRIOR YEAR'S VALUATION**
- **SUBSEQUENT EVENTS**

CTY022687



## Introduction

This report presents the results of the June 30, 2012 actuarial valuation of the SAFETY PLAN OF THE CITY OF STOCKTON of the California Public Employees' Retirement System (CalPERS). This actuarial valuation sets the fiscal year 2014-15 required employer contribution rates.

On January 1, 2013, the Public Employees' Pension Reform Act of 2013 (PEPRA) took effect. The impact of most of the PEPRA changes will first show up in the rates and the benefit provision listings of the June 30, 2013 valuation, which sets the 2015-16 contribution rates. For more information on PEPRA, please refer to the CalPERS website.

On April 17, 2013, the CalPERS Board of Administration approved a recommendation to change the CalPERS amortization and smoothing policies. Prior to this change, CalPERS employed an amortization and smoothing policy, which spread investment returns over a 15-year period while experience gains and losses were amortized over a rolling 30-year period. Effective with the June 30, 2013 valuations, CalPERS will no longer use an actuarial value of assets and will employ an amortization and smoothing policy that will spread rate increases or decreases over a 5-year period, and will amortize all experience gains and losses over a fixed 30-year period.

The new amortization and smoothing policy will be used for the first time in the June 30, 2013 actuarial valuations. These valuations will be performed in the fall of 2014 and will set employer contribution rates for the fiscal year 2015-16.

As stewards of the System, CalPERS must ensure that the pension fund is sustainable over multiple generations. Our strategic plan calls for us to take an integrated view of our assets and liabilities and to take steps designed to achieve a fully funded plan. A review of the preferred asset allocation mix for CalPERS investment portfolio will be performed in late 2013, which could influence future discount rates. In addition, CalPERS will review economic and demographic assumptions, including mortality rate improvements that are likely to increase employer contribution rates in future years.

## Purpose of the Report

The actuarial valuation was prepared by the CalPERS Actuarial Office using data as of June 30, 2012. The purpose of the report is to:

- Set forth the actuarial assets and accrued liabilities of this plan as of June 30, 2012;
- Determine the required employer contribution rate for the fiscal year July 1, 2014 through June 30, 2015;
- Provide actuarial information as of June 30, 2012 to the CalPERS Board of Administration and other interested parties, and to;
- Provide pension information as of June 30, 2012 to be used in financial reports subject to Governmental Accounting Standards Board (GASB) Statement Number 27 for a Single Employer Defined Benefit Pension Plan.

### California Actuarial Advisory Panel Recommendations

This report includes all the basic disclosure elements as described in the *Model Disclosure Elements for Actuarial Valuation Reports* recommended in 2011 by the California Actuarial Advisory Panel (CAAP), with the exception of including the original base amounts of the various components of the unfunded liability in the Schedule of Amortization Bases shown on page 19.

Additionally, this report includes the following "Enhanced Risk Disclosures" also recommended by the CAAP in the Model Disclosure Elements document:

- A "Deterministic Stress Test," projecting future results under different investment income scenarios
- A "Sensitivity Analysis," showing the impact on current valuation results using a 1% plus or minus change in the discount rate.

The use of this report for any other purposes may be inappropriate. In particular, this report does not contain information applicable to alternative benefit costs. The employer should contact their actuary before disseminating any portion of this report for any reason that is not explicitly described above.

## Required Employer Contribution

	Fiscal Year 2013-14	Fiscal Year 2014-15
<b>Actuarially Determined Employer Contributions</b>		
1. Contribution in Projected Dollars		
a) Total Normal Cost	\$ 16,760,403	\$ 14,336,846
b) Employee Contribution <sup>1</sup>	5,011,749	4,401,856
c) Employer Normal Cost [(1a) - (1b)]	11,748,654	9,934,990
d) Unfunded Contribution	7,521,294	10,306,453
e) Required Employer Contribution [(1c) + (1d)]	\$ 19,269,948	\$ 20,241,443
Projected Annual Payroll for Contribution Year	\$ 55,686,101	\$ 48,909,515
2. Contribution as a Percentage of Payroll		
a) Total Normal Cost	30.098%	29.313%
b) Employee Contribution <sup>1</sup>	9.000%	9.000%
c) Employer Normal Cost [(2a) - (2b)]	21.098%	20.313%
d) Unfunded Rate	13.507%	21.072%
e) Required Employer Rate [(2c) + (2d)]	34.605%	41.385%
<b>Minimum Employer Contribution Rate<sup>2</sup></b>	<b>34.605%</b>	<b>41.385%</b>
Annual Lump Sum Prepayment Option <sup>3</sup>	\$ 18,585,588	\$ 19,522,581

<sup>1</sup>This is the percentage specified in the Public Employees Retirement Law, net of any reduction from the use of a modified formula or other factors. Employee cost sharing is not shown in this report.

<sup>2</sup>The Minimum Employer Contribution Rate under PEPRA is the greater of the required employer rate or the employer normal cost.

<sup>3</sup>Payment must be received by CalPERS before the first payroll reported to CalPERS of the new fiscal year and after June 30. If there is contractual cost sharing or other change, this amount will change.

## Plan's Funded Status

	June 30, 2011	June 30, 2012
1. Present Value of Projected Benefits	\$ 946,603,971	\$ 950,265,629
2. Entry Age Normal Accrued Liability	802,778,310	830,040,184
3. Actuarial Value of Assets (AVA)	685,732,778	685,764,728
4. Unfunded Liability (AVA Basis) [(2) - (3)]	\$ 117,045,532	\$ 144,275,456
5. Funded Ratio (AVA Basis) [(3) / (2)]	85.4%	82.6%
6. Market Value of Assets (MVA)	\$ 598,289,135	\$ 571,679,198
7. Unfunded Liability (MVA Basis) [(2) - (6)]	\$ 204,489,175	\$ 258,360,986
8. Funded Ratio (MVA Basis) [(6) / (2)]	74.5%	68.9%
Superfunded Status	No	No

## Cost

### Actuarial Cost Estimates in General

What will this pension plan cost? Unfortunately, there is no simple answer. There are two major reasons for the complexity of the answer. First, actuarial calculations, including the ones in this report, are based on a number of assumptions about the future. These assumptions can be divided into two categories.

- Demographic assumptions include the percentage of employees that will terminate, die, become disabled, and retire in each future year.
- Economic assumptions include future salary increases for each active employee, and the assumption with the greatest impact, future asset returns at CalPERS for each year into the future until the last dollar is paid to current members of your plan.

While CalPERS has set these assumptions to reflect our best estimate of the real future of your plan, it must be understood that these assumptions are very long-term predictors and will surely not be realized in any one year. For example, while the asset earnings at CalPERS have averaged more than the assumed return of 7.5 percent for the past twenty year period ending June 30, 2013, returns for each fiscal year ranged from negative -24 percent to +21.7 percent.

Second, the very nature of actuarial funding produces the answer to the question of plan cost as the sum of two separate pieces.

- The Normal Cost (i.e., the future annual premiums in the absence of surplus or unfunded liability) expressed as a percentage of total active payroll.
- The Past Service Cost or Accrued Liability (i.e., the current value of the benefit for all credited past service of current members) which is expressed as a lump sum dollar amount.

The cost is the sum of a percent of future pay and a lump sum dollar amount (the sum of an apple and an orange if you will). To communicate the total cost, either the Normal Cost (i.e., future percent of payroll) must be converted to a lump sum dollar amount (in which case the total cost is the present value of benefits), or the Past Service Cost (i.e., the lump sum) must be converted to a percent of payroll (in which case the total cost is expressed as the employer's rate, part of which is permanent and part temporary). Converting the Past Service Cost lump sum to a percent of payroll requires a specific amortization period, and the employer rate will vary depending on the amortization period chosen.

## Changes since the Prior Year's Valuation

### Benefits

The standard actuarial practice at CalPERS is to recognize mandated legislative benefit changes in the first annual valuation following the effective date of the legislation. Voluntary benefit changes by plan amendment are generally included in the first valuation that is prepared after the amendment becomes effective even if the valuation date is prior to the effective date of the amendment.

This valuation generally reflects plan changes by amendments effective before the date of the report. Please refer to Appendix B for a summary of the plan provisions used in this valuation. The effect of any mandated benefit changes or plan amendments on the unfunded liability is shown in the "(Gain)/Loss Analysis" and the effect on your employer contribution rate is shown in the "Reconciliation of Required Employer Contributions." It should be noted that no change in liability or rate is shown for any plan changes, which were already included in the prior year's valuation.

### Public Employees' Pension Reform Act of 2013 (PEPRA)

On January 1, 2013, the Public Employees' Pension Reform Act of 2013 (PEPRA) took effect, requiring that a public employer's contribution to a defined benefit plan, in combination with employee contributions to that defined benefit plan, shall not be less than the normal cost rate. Beginning July 1, 2013, this means that some plans with surplus will be paying more than they otherwise would. For more information on PEPRA, please refer to the CalPERS website.

## Subsequent Events

### Actuarial Methods and Assumptions

On April 17, 2013, the CalPERS Board of Administration approved a recommendation to change the CalPERS amortization and smoothing policies. Beginning with the June 30, 2013 valuations that set the 2015-16 rates, CalPERS will no longer use an actuarial value of assets and will employ an amortization and rate smoothing policy that will pay for all gains and losses over a fixed 30-year period with the increases or decreases in the rate spread directly over a 5-year period. The impact of this new actuarial methodology is reflected in the "Expected Rate Increases" subsection of the "Risk analysis" section of your report.

*Not reflected* in the "Expected Rate Increases" subsection of the "Risk analysis" section is the impact of assumption changes that we expect will also, impact future rates. A review of the preferred asset allocation mix for CalPERS investment portfolio will be performed in late 2013, which could influence future discount rates. In addition, CalPERS will review economic and demographic assumptions, including mortality rate improvements that are likely to increase employer contribution rates in future years.

### Bankruptcy

On June 28, 2012, the City of Stockton filed a petition for Chapter 9 bankruptcy protection with the United States Bankruptcy Court. That petition was approved by the Judge on April 1, 2013. The bankruptcy did not have an impact on the valuation or the determination of the required contributions for the 2014-15 fiscal year.

## **ASSETS**

- **RECONCILIATION OF THE MARKET VALUE OF ASSETS**
- **DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS**
- **ASSET ALLOCATION**
- **CALPERS HISTORY OF INVESTMENT RETURNS**

CTY022692

**Reconciliation of the Market Value of Assets**

1. Market Value of Assets as of 6/30/11 Including Receivables	\$	598,289,135
2. Receivables for Service Buybacks as of 6/30/11		598,451
3. Market Value of Assets as of 6/30/11		597,690,684
4. Employer Contributions		13,384,977
5. Employee Contributions		4,392,327
6. Benefit Payments to Retirees and Beneficiaries		(42,339,890)
7. Refunds		(69,339)
8. Lump Sum Payments		0
9. Transfers and Miscellaneous Adjustments		(1,283,259)
10. Investment Return		(1,347,850)
11. Market Value of Assets as of 6/30/12	\$	570,427,650
12. Receivables for Service Buybacks as of 6/30/12		1,251,548
13. Market Value of Assets as of 6/30/12 Including Receivables	\$	571,679,198

**Development of the Actuarial Value of Assets**

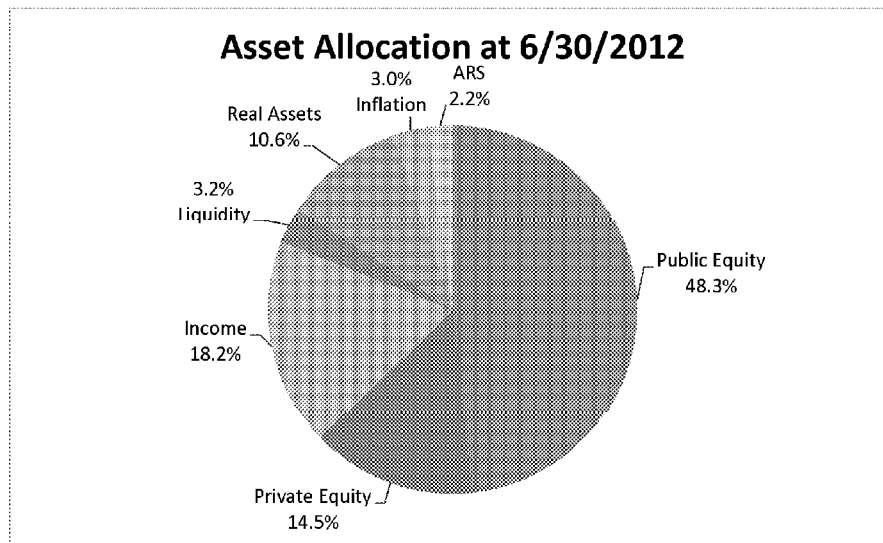
1. Actuarial Value of Assets as of 6/30/11 Used For Rate Setting Purposes	\$	685,732,778
2. Receivables for Service Buybacks as of 6/30/11		598,451
3. Actuarial Value of Assets as of 6/30/11		685,134,327
4. Employer Contributions		13,384,977
5. Employee Contributions		4,392,327
6. Benefit Payments to Retirees and Beneficiaries		(42,339,890)
7. Refunds		(69,339)
8. Lump Sum Payments		0
9. Transfers and Miscellaneous Adjustments		(1,283,259)
10. Expected Investment Income at 7.5%		50,430,824
11. Expected Actuarial Value of Assets	\$	709,649,967
12. Market Value of Assets as of 6/30/12	\$	570,427,650
13. Preliminary Actuarial Value of Assets $[(11) + ((12) - (11)) / 15]$		700,368,479
14. Maximum Actuarial Value of Assets (120% of (12))		684,513,180
15. Minimum Actuarial Value of Assets (80% of (12))		456,342,120
16. Actuarial Value of Assets {Lesser of [(14), Greater of ((13), (15))]}]		684,513,180
17. Actuarial Value to Market Value Ratio		120.0%
18. Receivables for Service Buybacks as of 6/30/12		1,251,548
19. Actuarial Value of Assets as of 6/30/12 Used for Rate Setting Purposes	\$	685,764,728

## Asset Allocation

CalPERS adheres to an Asset Allocation Strategy which establishes asset class allocation policy targets and ranges, and manages those asset class allocations within their policy ranges. CalPERS recognizes that over 90 percent of the variation in investment returns of a well-diversified pool of assets can typically be attributed to asset allocation decisions. In December 2010 the Board approved the policy asset class targets and ranges listed below. These policy asset allocation targets and ranges are expressed as a percentage of total assets and were expected to be implemented over a period of one to two years beginning July 1, 2011 and reviewed again in December 2013.

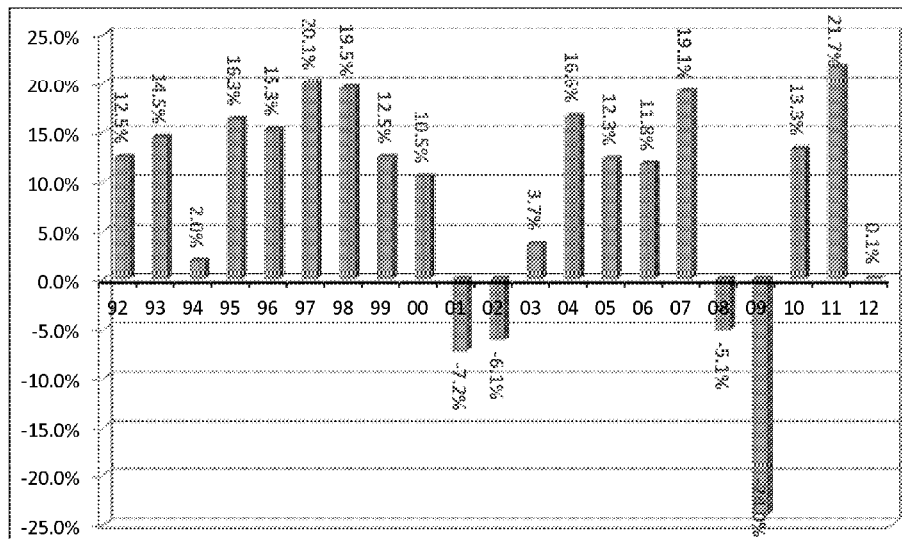
The asset allocation and market value of assets shown below reflect the values of the Public Employees Retirement Fund (PERF) in its entirety as of June 30, 2012. The assets for CITY OF STOCKTON SAFETY PLAN are part of the Public Employees Retirement Fund (PERF) and are invested accordingly.

(A) Asset Class	(B) Market Value (\$ Billion)	(C) Policy Target Allocation	(D) Policy Target Range
1) Public Equity	113.0	50.0%	+/- 7%
2) Private Equity	33.9	14.0%	+/- 4%
3) Fixed Income	42.6	17.0%	+/- 5%
4) Cash Equivalents	7.5	4.0%	+/- 5%
5) Real Assets	24.8	11.0%	+/- 3%
6) Inflation Assets	7.0	4.0%	+/- 3%
7) Absolute Return Strategy (ARS)	5.1	0.0%	N/A
<b>Total Fund</b>	<b>\$233.9</b>	<b>100.0%</b>	<b>N/A</b>



**CalPERS History of Investment Returns**

The following is a chart with historical annual returns of the Public Employees Retirement Fund for each fiscal year ending on June 30. Beginning in 2002, the figures are reported as gross of fees.





## **LIABILITIES AND RATES**

- **DEVELOPMENT OF ACCRUED AND UNFUNDED LIABILITIES**
- **(GAIN) / LOSS ANALYSIS 06/30/11 - 06/30/12**
- **SCHEDULE OF AMORTIZATION BASES**
- **RECONCILIATION OF REQUIRED EMPLOYER CONTRIBUTIONS**
- **EMPLOYER CONTRIBUTION RATE HISTORY**
- **FUNDING HISTORY**

CTY022696

**Development of Accrued and Unfunded Liabilities**

1.	Present Value of Projected Benefits		
	a) Active Members	\$	334,080,503
	b) Transferred Members		17,477,674
	c) Terminated Members		6,534,659
	d) Members and Beneficiaries Receiving Payments		592,172,793
	e) Total	\$	<u>950,265,629</u>
2.	Present Value of Future Employer Normal Costs	\$	82,997,783
3.	Present Value of Future Employee Contributions	\$	37,227,662
4.	Entry Age Normal Accrued Liability		
	a) Active Members [(1a) - (2) - (3)]	\$	213,855,058
	b) Transferred Members (1b)		17,477,674
	c) Terminated Members (1c)		6,534,659
	d) Members and Beneficiaries Receiving Payments (1d)		592,172,793
	e) Total	\$	<u>830,040,184</u>
5.	Actuarial Value of Assets (AVA)	\$	685,764,728
6.	Unfunded Accrued Liability (AVA Basis) [(4e) - (5)]	\$	144,275,456
7.	Funded Ratio (AVA Basis) [(5) / (4e)]		82.6%
8.	Market Value of Assets (MVA)	\$	571,679,198
9.	Unfunded Liability (MVA Basis) [(4e) - (8)]	\$	258,360,986
10.	Funded Ratio (MVA Basis) [(8) / (4e)]		68.9%

**(Gain) /Loss Analysis 6/30/11 – 6/30/12**

To calculate the cost requirements of the plan, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is compared to the expected experience based on the actuarial assumptions. This results in actuarial gains or losses, as shown below.

<b>A Total (Gain)/Loss for the Year</b>	
1. Unfunded Accrued Liability (UAL) as of 6/30/11	\$ 117,045,532
2. Expected Payment on the UAL during 2011/2012	4,199,684
3. Interest through 6/30/12 $[(.075 \times (A1) - ((1.075)^{1/2} - 1) \times (A2))]$	8,623,774
4. Expected UAL before all other changes $[(A1) - (A2) + (A3)]$	121,469,622
5. Change due to plan changes	0
6. Change due to assumption change	0
7. Expected UAL after all other changes $[(A4) + (A5) + (A6)]$	121,469,622
8. Actual UAL as of 6/30/12	144,275,456
9. Total (Gain)/Loss for 2011/2012 $[(A8) - (A7)]$	\$ 22,805,834
<b>B Contribution (Gain)/Loss for the Year</b>	
1. Expected Contribution (Employer and Employee)	\$ 19,997,971
2. Interest on Expected Contributions	736,367
3. Actual Contributions	17,777,304
4. Interest on Actual Contributions	654,597
5. Expected Contributions with Interest $[(B1) + (B2)]$	20,734,338
6. Actual Contributions with Interest $[(B3) + (B4)]$	18,431,901
7. Contribution (Gain)/Loss $[(B5) - (B6)]$	\$ 2,302,437
<b>C Asset (Gain)/Loss for the Year</b>	
1. Actuarial Value of Assets as of 6/30/11 Including Receivables	\$ 685,732,778
2. Receivables as of 6/30/11	598,451
3. Actuarial Value of Assets as of 6/30/11	685,134,327
4. Contributions Received	17,777,304
5. Benefits and Refunds Paid	(42,409,229)
6. Transfers and miscellaneous adjustments	(1,283,259)
7. Expected Int. $[(.075 \times (C3) + ((1.075)^{1/2} - 1) \times ((C4) + (C5) + (C6))]$	50,430,824
8. Expected Assets as of 6/30/12 $[(C3) + (C4) + (C5) + (C6) + (C7)]$	709,649,967
9. Receivables as of 6/30/12	1,251,548
10. Expected Assets Including Receivables	710,901,515
11. Actual Actuarial Value of Assets as of 6/30/12	685,764,728
12. Asset (Gain)/Loss $[(C10) - (C11)]$	\$ 25,136,787
<b>D Liability (Gain)/Loss for the Year</b>	
1. Total (Gain)/Loss (A9)	\$ 22,805,834
2. Contribution (Gain)/Loss (B7)	2,302,437
3. Asset (Gain)/Loss (C12)	25,136,787
4. Liability (Gain)/Loss $[(D1) - (D2) - (D3)]$	\$ (4,633,390)
<b>Development of the (Gain)/Loss Balance as of 6/30/12</b>	
1. (Gain)/Loss Balance as of 6/30/11	\$ 20,156,066
2. Payment Made on the Balance during 2011/2012	1,210,391
3. Interest through 6/30/12 $[(.075 \times (1) - ((1.075)^{1/2} - 1) \times (2))]$	1,467,136
4. Scheduled (Gain)/Loss Balance as of 6/30/12 $[(1) - (2) + (3)]$	\$ 20,412,811
5. (Gain)/Loss for Fiscal Year ending 6/30/12 $[(A9) \text{ above}]$	22,805,834
6. Final (Gain)/Loss Balance as of 6/30/12 $[(4) + (5)]$	\$ 43,218,645

CALPERS ACTUARIAL VALUATION - June 30, 2012  
SAFETY PLAN OF THE CITY OF STOCKTON  
CALPERS ID: 637397:665

## Schedule of Amortization Bases

There is a two-year lag between the Valuation Date and the Contribution Fiscal Year.

- The assets, liabilities and funded status of the plan are measured as of the valuation date; June 30, 2012.
- The employer contribution rate determined by the valuation is for the fiscal year beginning two years after the valuation date; fiscal year 2014-15.

This two-year lag is necessary due to the amount of time needed to extract and test the membership and financial data, and due to the need to provide public agencies with their employer contribution rates well in advance of the start of the fiscal year.

The Unfunded Liability is used to determine the employer contribution and therefore must be rolled forward two years from the valuation date to the first day of the fiscal year for which the contribution is being determined. The Unfunded Liability is rolled forward each year by subtracting the expected Payment on the Unfunded Liability for the fiscal year and adjusting for interest. The Expected Payment on the Unfunded Liability for a fiscal year is equal to the Expected Employer Contribution for the fiscal year minus the Expected Normal Cost for the year. The Employer Contribution Rate for the first fiscal year is determined by the actuarial valuation two years ago and the rate for the second year is from the actuarial valuation one year ago. The Normal Cost Rate for each of the two fiscal years is assumed to be the same as the rate determined by the current valuation. All expected dollar amounts are determined by multiplying the rate by the expected payroll for the applicable fiscal year, based on payroll as of the valuation date.

Reason for Base	Date Established	Amortization Period	Balance 6/30/12	Expected Payment 2012-13	Balance 6/30/13	Expected Payment 2013-14	Amounts for Fiscal 2014-15		
							Balance 6/30/14	Scheduled Payment for 2014-15	Percent-age of Payroll
FRESH START	06/30/06	24	\$22,511,026	\$1,459,677	\$22,685,928	\$1,499,414	\$22,832,747	\$1,544,396	3.158%
ASSUMPTION CHANGE	06/30/09	17	\$16,572,337	\$1,296,704	\$16,470,811	\$1,331,579	\$16,325,511	\$1,371,526	2.804%
SPECIAL (GAIN)/LOSS	06/30/09	27	\$1,184,119	\$1,909,179	\$31,543,449	\$1,961,378	\$31,875,608	\$2,020,219	4.131%
SPECIAL (GAIN)/LOSS	06/30/10	28	\$12,604,205	\$758,655	\$12,762,930	\$79,484	\$12,911,964	\$802,869	1.642%
GOLDEN HANDSHAKE	06/30/11	19	\$3,310,801	\$0	\$3,559,111	\$268,732	\$3,547,417	\$276,794	0.566%
ASSUMPTION CHANGE	06/30/11	19	\$15,035,938	\$(310,328)	\$16,485,388	\$14,912	\$17,291,602	\$1,349,211	2.759%
SPECIAL (GAIN)/LOSS	06/30/11	29	\$(1,449,577)	\$0	\$(1,558,296)	\$(93,576)	\$(1,578,147)	\$(96,384)	(0.197%)
PAYMENT (GAIN)/LOSS	06/30/12	30	\$1,287,962	\$(1,051,519)	\$2,474,798	\$(616,603)	\$3,299,713	\$198,149	0.405%
(GAIN)/LOSS	06/30/12	30	\$43,218,645	\$1,228,748	\$45,186,051	\$1,241,231	\$47,288,069	\$2,839,673	5.806%
<b>TOTAL</b>			<b>\$144,275,456</b>	<b>\$5,291,116</b>	<b>\$149,610,170</b>	<b>\$6,786,551</b>	<b>\$153,794,486</b>	<b>\$10,306,453</b>	<b>21.072%</b>

The special (gain)/loss bases were established using the temporary modification recognized in the 2009, 2010 and 2011 annual valuations. Unlike the gain/loss occurring in previous and subsequent years, the gain/loss recognized in the 2009, 2010, and 2011 annual valuations will be amortized over fixed and declining 30-year periods so that these annual gain/losses will be fully paid off in 30 years. The gain/loss recognized in 2012 and later valuations will be combined with the gain/loss from 2008 and earlier valuations.

CTY022699

**Reconciliation of Required Employer Contributions**

	<b>Percentage of Projected Payroll</b>	<b>Estimated \$ Based on Projected Payroll</b>
1. Contribution for 7/1/13 – 6/30/14	34.605%	\$ 19,269,948
2. Effect of changes since the prior year annual valuation		
a) Effect of unexpected changes in demographics and financial results	6.780%	3,316,533
b) Effect of plan changes	0.000%	0
c) Effect of changes in Assumptions	0.000%	0
d) Effect of change in payroll	-	(2,345,038)
e) Effect of elimination of amortization base	0.000%	0
f) Effect of changes due to Fresh Start	0.000%	0
g) Net effect of the changes above [Sum of (a) through (f)]	6.780%	971,495
3. Contribution for 7/1/14 – 6/30/15 [(1)+(2g)]	41.385%	20,241,443

The contribution actually paid (item 1) may be different if a prepayment of unfunded actuarial liability is made or a plan change became effective after the prior year's actuarial valuation was performed.

## Employer Contribution Rate History

The table below provides a recent history of the employer contribution rates for your plan, as determined by the annual actuarial valuation. It does not account for prepayments or benefit changes made in the middle of the year.

### Required By Valuation

<b>Fiscal Year</b>	<b>Employer Normal Cost</b>	<b>Unfunded Rate</b>	<b>Total Employer Contribution Rate</b>
2010 - 2011	19.193%	4.078%	23.271%
2011 - 2012	20.255%	8.844%	29.099%
2012 - 2013	20.675%	11.115%	31.790%
2013 - 2014	21.098%	13.507%	34.605%
2014 - 2015	20.313%	21.072%	41.385%

## Funding History

The Funding History below shows the recent history of the actuarial accrued liability, the market value of assets, the actuarial value of assets, funded ratios and the annual covered payroll. The Actuarial Value of Assets is used to establish funding requirements and the funded ratio on this basis represents the progress toward fully funding future benefits for current plan participants. The funded ratio based on the Market Value of Assets is an indicator of the short-term solvency of the plan.

<b>Valuation Date</b>	<b>Accrued Liability</b>	<b>Actuarial Value of Assets (AVA)</b>	<b>Market Value of Assets (MVA)</b>	<b>Funded Ratio</b>		<b>Annual Covered Payroll</b>
				<b>AVA</b>	<b>MVA</b>	
06/30/08	\$ 664,028,434	\$ 625,633,414	\$ 630,768,567	94.2%	95.0%	\$ 56,811,031
06/30/09	724,324,197	644,939,577	461,800,556	89.0%	63.8%	58,595,623
06/30/10	758,325,561	662,601,684	509,873,530	87.4%	67.2%	54,798,082
06/30/11	802,778,310	685,732,778	598,289,135	85.4%	74.5%	50,960,671
06/30/12	830,040,184	685,764,728	571,679,198	82.6%	68.9%	44,759,135

## **RISK ANALYSIS**

- **VOLATILITY RATIOS**
- **PROJECTED RATES**
- **ANALYSIS OF FUTURE INVESTMENT RETURN SCENARIOS**
- **ANALYSIS OF DISCOUNT RATE SENSITIVITY**
- **HYPOTHETICAL TERMINATION LIABILITY**

CTY022702

## Volatility Ratios

The actuarial calculations supplied in this communication are based on a number of assumptions about very long-term demographic and economic behavior. Unless these assumptions (terminations, deaths, disabilities, retirements, salary growth, and investment return) are exactly realized each year, there will be differences on a year-to-year basis. The year-to-year differences between actual experience and the assumptions are called actuarial gains and losses and serve to lower or raise the employer's rates from one year to the next. Therefore, the rates will inevitably fluctuate, especially due to the ups and downs of investment returns.

### Asset Volatility Ratio (AVR)

Plans that have higher asset to payroll ratios produce more volatile employer rates due to investment return. For example, a plan with an asset to payroll ratio of 8 may experience twice the contribution volatility due to investment return volatility, than a plan with an asset to payroll ratio of 4. Below we have shown your asset volatility ratio, a measure of the plan's current rate volatility. It should be noted that this ratio is a measure of the current situation. It increases over time but generally tends to stabilize as the plan matures.

### Liability Volatility Ratio

Plans that have higher liability to payroll ratios produce more volatile employer rates due to investment return and changes in liability. For example, a plan with a liability to payroll ratio of 8 is expected to have twice the contribution volatility of a plan with a liability to payroll ratio of 4. The liability volatility ratio is also included in the table below. It should be noted that this ratio indicates a longer-term potential for contribution volatility and the asset volatility ratio, described above, will tend to move closer to this ratio as the plan matures.

Rate Volatility	As of June 30, 2012	
1. Market Value of Assets without Receivables	\$	570,427,650
2. Payroll		44,759,135
3. Asset Volatility Ratio (AVR = 1. / 2.)		12.7
4. Accrued Liability	\$	830,040,184
5. Liability Volatility Ratio (4. / 2.)		18.5



## Projected Rates

On April 17, 2013, the CalPERS Board of Administration approved a recommendation to change the CalPERS amortization and smoothing policies. Beginning with the June 30, 2013 valuations that will set the 2015-16 rates, CalPERS will employ an amortization and rate smoothing policy that will pay for all gains and losses over a fixed 30-year period with the increases or decreases in the rate spread directly over a 5-year period. The table below shows projected employer contribution rates (before cost sharing) for the next five Fiscal Years, ***assuming CalPERS earns 12% for fiscal year 2012-13 and 7.50 percent every fiscal year thereafter***, and assuming that all other actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur between now and the beginning of the fiscal year 2015-16. ***Consequently, these projections do not take into account potential rate increases from likely future assumption changes.*** Nor do they take into account the positive impact PEPPA is expected to gradually have on the normal cost.

	New Rate	Projected Future Employer Contribution Rates				
	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
<b>Contribution Rates:</b>	41.385%	44.5%	47.7%	50.8%	54.0%	57.1%

## Analysis of Future Investment Return Scenarios

In July 2013, the investment return for fiscal year 2012-13 was announced to be 12.5 percent. Note that this return is before administrative expenses and also does not reflect final investment return information for real estate and private equities. The final return information for these two asset classes is expected to be available later in October. For purposes of projecting future employer rates, we are assuming a 12 percent investment return for fiscal year 2012-13.

The investment return realized during a fiscal year first affects the contribution rate for the fiscal year 2 years later. Specifically, the investment return for 2012-13 will first be reflected in the June 30, 2013 actuarial valuation that will be used to set the 2015-16 employer contribution rates, the 2013-14 investment return will first be reflected in the June 30, 2014 actuarial valuation that will be used to set the 2016-17 employer contribution rates and so forth.

Based on a 12 percent investment return for fiscal year 2012-13 **and the April 17, 2013 CalPERS Board-approved amortization and rate smoothing method change**, and assuming that all other actuarial assumptions will be realized, and that no further changes to assumptions, contributions, benefits, or funding will occur between now and the beginning of the fiscal year 2015-16, the effect on the 2015-16 Employer Rate is as follows: (Note that this estimated rate does not reflect additional assumption changes as discussed in the "Subsequent Events" section.)

### Estimated 2015-16 Employer Rate

44.5%

### Estimated Increase in Employer Rate between 2014-15 and 2015-16

3.1%

As part of this report, a sensitivity analysis was performed to determine the effects of various investment returns during fiscal years 2013-14, 2014-15 and 2015-16 on the 2016-17, 2017-18 and 2018-19 employer rates. Once again, the projected rate increases assume that all other actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur.

Five different investment return scenarios were selected.

- The first scenario is what one would expect if the markets were to give us a 5<sup>th</sup> percentile return from July 1, 2013 through June 30, 2016. The 5<sup>th</sup> percentile return corresponds to a -4.1 percent return for each of the 2013-14, 2014-15 and 2015-16 fiscal years.
- The second scenario is what one would expect if the markets were to give us a 25<sup>th</sup> percentile return from July 1, 2013 through June 30, 2016. The 25<sup>th</sup> percentile return corresponds to a 2.6 percent return for each of the 2013-14, 2014-15 and 2015-16 fiscal years.
- The third scenario assumed the return for 2013-14, 2014-15, 2015-16 would be our assumed 7.5 percent investment return which represents about a 49<sup>th</sup> percentile event.
- The fourth scenario is what one would expect if the markets were to give us a 75<sup>th</sup> percentile return from July 1, 2013 through June 30, 2016. The 75<sup>th</sup> percentile return corresponds to a 11.9 percent return for each of the 2013-14, 2014-15 and 2015-16 fiscal years.
- Finally, the last scenario is what one would expect if the markets were to give us a 95<sup>th</sup> percentile return from July 1, 2013 through June 30, 2016. The 95<sup>th</sup> percentile return corresponds to a 18.5 percent return for each of the 2013-14, 2014-15 and 2015-16 fiscal years.

The table below shows the estimated projected contribution rates and the estimated increases for your plan under the five different scenarios.

2013-16 Investment Return Scenario	Estimated Employer Rate			Estimated Change in Employer Rate between 2015-16 and 2018-19
	2016-17	2017-18	2018-19	
-4.1% (5th percentile)	49.9%	57.1%	66.2%	21.7%
2.6% (25th percentile)	48.6%	53.6%	59.4%	14.9%
7.5%	47.7%	50.8%	54.0%	9.5%
11.9%(75th percentile)	46.8%	48.3%	48.8%	4.3%
18.5%(95th percentile)	45.6%	44.4%	40.6%	-3.9%

## Analysis of Discount Rate Sensitivity

The following analysis looks at the 2014-15 employer contribution rates under two different discount rate scenarios. Shown below are the employer contribution rates assuming discount rates that are 1 percent lower and 1 percent higher than the current valuation discount rate. This analysis gives an indication of the potential required employer contribution rates if the PERF were to realize investment returns of 6.50 percent or 8.50 percent over the long-term.

This type of analysis gives the reader a sense of the long-term risk to the employer contribution rates.

As of June 30, 2012	2014-15 Employer Contribution Rate		
	6.50% Discount Rate (-1%)	7.50% Discount Rate (assumed rate)	8.50% Discount Rate (+1%)
Employer Normal Cost	28.173%	20.313%	14.374%
Unfunded Rate Payment	38.059%	21.072%	5.734%
Total	66.232%	41.385%	20.108%

## Hypothetical Termination Liability

Below is an estimate of the financial position of your plan if you had terminated your contract with CalPERS as of June 30, 2012 using the discount rates shown below. Your plan liability on a termination basis is calculated differently compared to the plan's ongoing funding liability. In December 2012, the CalPERS Board adopted a more conservative investment policy and asset allocation strategy for the Terminated Agency Pool. Since the Terminated Agency Pool has limited funding sources, expected benefit payments are secured by risk-free assets. With this change, CalPERS increased benefit security for members while limiting its funding risk. This asset allocation has a lower expected rate of return than the PERF. Consequently, the lower discount rate for the Terminated Agency pool results in higher liabilities for terminated plans.

In order to terminate your plan, you must first contact our Retirement Services Contract Unit to initiate a Resolution of Intent to Terminate. The completed Resolution will allow your plan actuary to give you a preliminary termination valuation with a more up-to-date estimate of your plan liabilities. CalPERS advises you to consult with your plan actuary before beginning this process.

Valuation Date	Hypothetical Termination Liability <sup>1</sup>	Market Value of Assets (MVA)	Unfunded Termination Liability	Termination Funded Ratio	Termination Liability Discount Rate <sup>2</sup>
06/30/11	\$ 1,186,712,063	\$ 598,289,135	\$ 588,422,928	50.4%	4.82%
06/30/12	1,614,069,650	571,679,198	1,042,390,452	35.4%	2.98%

<sup>1</sup> The hypothetical liabilities calculated above include a 7 percent mortality contingency load in accordance with Board policy. Other actuarial assumptions, such as wage and inflation assumptions, can be found in appendix A.

<sup>2</sup> The discount rate assumption used for termination valuations is a weighted average of the 10 and 30-year US Treasury yields in effect on the valuation date that equal the duration of the pension liabilities. For purposes of this hypothetical termination liability estimate, the discount rate used, 2.98 percent, is the yield on the 30-year US Treasury Separate Trading of Registered Interest and Principal of Securities (STRIPS) as of June 30, 2012. In last year's report the May 2012 rate of 2.87 percent was inadvertently shown rather than the June rate of 2.98 percent. Please note, as of June 30, 2013 the 30-year STRIPS yield was 3.72 percent.

# Exhibit P

Forecast Calculations-Safety-New Baseline\_v4 - 12.5% market return with Marshall Plan

## Safety Plan, Without Hardship Exemption

(\$ in million)

### Reflects the following changes for the 2015/2016 fiscal year:

- \* Change in smoothing method/amortization approach
- \* Decrease in discount rate from 7.50% to 7.25%
- \* Fully generational mortality tables
- \* Preliminary market return of 12.5% for FYE 6/30/2013
- \* 120 officers added by FYE 2017 via Marshall Plan

Valuation Date	06/30/2009	06/30/2010	06/30/2011	06/30/2012	06/30/2013	06/30/2014	06/30/2015	06/30/2016	06/30/2017	06/30/2018	06/30/2019	06/30/2020	06/30/2021	06/30/2022	06/30/2023	06/30/2024
Contribution for Fiscal Year	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024			
Net Normal Cost	\$ 13.1	\$ 12.5	\$ 11.7	\$ 10.7	\$ 11.8	\$ 11.5	\$ 11.7	\$ 12.3	\$ 12.8	\$ 12.7	\$ 12.4	\$ 12.2	\$ 11.9			
Unfunded Contribution	5.7	6.7	7.5	9.6	15.4	17.3	19.3	21.4	23.7	24.4	25.1	25.9	26.6			
Net Employer Contribution	\$ 18.8	\$ 19.2	\$ 19.2	\$ 20.3	\$ 27.2	\$ 28.8	\$ 31.0	\$ 33.7	\$ 36.5	\$ 37.0	\$ 37.6	\$ 38.1	\$ 38.6			
Projected Payroll	\$ 64.5	\$ 60.3	\$ 55.7	\$ 49.5	\$ 50.6	\$ 51.7	\$ 56.0	\$ 60.5	\$ 65.1	\$ 66.1	\$ 67.1	\$ 68.1	\$ 69.1			
Net Normal Cost %	20.26%	20.67%	21.03%	21.68%	23.37%	22.20%	20.85%	20.26%	19.66%	19.14%	18.55%	17.97%	17.29%			
Unfunded Contribution %	8.84%	11.12%	13.51%	19.35%	30.38%	33.46%	34.47%	35.42%	36.37%	36.87%	37.42%	37.96%	38.54%			
Net Employer Contribution %	29.10%	31.79%	34.53%	41.03%	53.75%	55.66%	55.32%	55.69%	56.03%	56.01%	55.97%	55.93%	55.83%			

Forecast Calculations-Safety-New Baseline\_v4 - 12.5% market return with Marshall Plan

## Safety Plan, Without Hardship Exemption

(\$ in million)

### Reflects the following changes for the 2015/2016 fiscal year:

- \* Change in smoothing method/amortization approach
- \* Decrease in discount rate from 7.50% to 7.25%
- \* Fully generational mortality tables
- \* Preliminary market return of 12.5% for FYE 6/30/2013
- \* 120 officers added by FYE 2017 via Marshall Plan

Valuation Date	06/30/2022	06/30/2023	06/30/2024	06/30/2025	06/30/2026	06/30/2027	06/30/2028	06/30/2029	06/30/2030	06/30/2031	06/30/2032	06/30/2033	06/30/2034	06/30/2035	06/30/2036	06/30/2037
Contribution for Fiscal Year	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030	2030/2031	2031/2032	2032/2033	2033/2034	2034/2035	2035/2036	2036/2037			
Net Normal Cost	\$ 11.6	\$ 11.2	\$ 10.9	\$ 10.5	\$ 10.2	\$ 9.8	\$ 9.5	\$ 9.2	\$ 8.9	\$ 8.5	\$ 8.3	\$ 8.0	\$ 7.7			
Unfunded Contribution	27.4	28.3	29.1	30.0	30.9	31.8	32.8	31.5	32.5	30.6	31.6	24.7	25.4			
Net Employer Contribution	\$ 39.1	\$ 39.5	\$ 40.0	\$ 40.5	\$ 41.0	\$ 41.6	\$ 42.3	\$ 40.7	\$ 41.3	\$ 39.2	\$ 39.8	\$ 32.7	\$ 33.1			
Projected Payroll	\$ 70.1	\$ 71.2	\$ 72.4	\$ 73.7	\$ 75.0	\$ 76.6	\$ 78.2	\$ 79.9	\$ 81.8	\$ 83.6	\$ 85.7	\$ 87.9	\$ 90.2			
Net Normal Cost %	16.58%	15.79%	15.02%	14.31%	13.54%	12.85%	12.16%	11.49%	10.87%	10.21%	9.64%	9.07%	8.53%			
Unfunded Contribution %	39.12%	39.69%	40.22%	40.69%	41.16%	41.53%	41.89%	39.43%	39.70%	36.63%	36.81%	28.11%	28.21%			
Net Employer Contribution %	55.70%	55.49%	55.24%	55.00%	54.70%	54.38%	54.05%	50.92%	50.57%	46.84%	46.46%	37.18%	36.74%			

Forecast Calculations-Safety-New Baseline\_v4 - 12.5% market return with Marshall Plan

## Safety Plan, Without Hardship Exemption

(\$ in million)

### Reflects the following changes for the 2015/2016 fiscal year:

- \* Change in smoothing method/amortization approach
- \* Decrease in discount rate from 7.50% to 7.25%
- \* Fully generational mortality tables
- \* Preliminary market return of 12.5% for FYE 6/30/2013
- \* 120 officers added by FYE 2017 via Marshall Plan

Valuation Date	06/30/2035	06/30/2036	06/30/2037	06/30/2038	06/30/2039	06/30/2040	06/30/2041	06/30/2042	06/30/2043	06/30/2044	06/30/2045	06/30/2046	06/30/2047	06/30/2048	06/30/2049	06/30/2050
Contribution for Fiscal Year	2037/2038	2038/2039	2039/2040	2040/2041	2041/2042	2042/2043	2043/2044	2044/2045	2045/2046	2046/2047	2047/2048	2048/2049	2049/2050			
Net Normal Cost	\$ 7.5	\$ 7.3	\$ 7.2	\$ 7.2	\$ 7.4	\$ 7.6	\$ 7.9	\$ 8.1	\$ 8.4	\$ 8.6	\$ 8.9	\$ 9.2	\$ 9.5			
Unfunded Contribution	26.2	23.9	24.6	25.4	18.7	14.3	11.5	3.3	-	-	-	-	-			
Net Employer Contribution	\$ 33.7	\$ 31.2	\$ 31.9	\$ 32.6	\$ 26.1	\$ 22.0	\$ 19.3	\$ 11.4	\$ 8.4	\$ 8.6	\$ 8.9	\$ 9.2	\$ 9.5			
Projected Payroll	\$ 92.7	\$ 95.4	\$ 98.3	\$ 101.4	\$ 104.6	\$ 107.9	\$ 111.3	\$ 114.8	\$ 118.4	\$ 122.1	\$ 125.9	\$ 129.9	\$ 134.0			
Net Normal Cost %	8.05%	7.67%	7.35%	7.12%	7.07%	7.07%	7.07%	7.07%	7.07%	7.07%	7.07%	7.07%	7.07%			
Unfunded Contribution %	28.27%	25.07%	25.06%	25.02%	17.89%	13.29%	10.31%	2.90%	0.00%	0.00%	0.00%	0.00%	0.00%			
Net Employer Contribution %	36.32%	32.73%	32.40%	32.14%	24.95%	20.36%	17.38%	9.97%	7.07%	7.07%	7.07%	7.07%	7.07%			

Forecast Calculations-Misc-New Baseline\_v4 - 12.5% market return with Marshall Plan

## Miscellaneous Plan, Without Hardship Exemption

(\$ in million)

### Reflects the following changes for the 2015/2016 fiscal year:

- \* Change in smoothing method/amortization approach
- \* Decrease in discount rate from 7.50% to 7.25%
- \* Fully generational mortality tables
- \* Preliminary market return of 12.5% for FYE 6/30/2013
- \* 5 records assistants added by FYE 2017 via Marshall Plan

Valuation Date	06/30/2009	06/30/2010	06/30/2011	06/30/2012	06/30/2013	06/30/2014	06/30/2015	06/30/2016	06/30/2017	06/30/2018	06/30/2019	06/30/2020	06/30/2021	06/30/2022	06/30/2023	06/30/2024
Contribution for Fiscal Year	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024			
Net Normal Cost	\$ 7.2	\$ 6.4	\$ 6.2	\$ 6.4	\$ 7.3	\$ 7.4	\$ 7.5	\$ 7.5	\$ 7.6	\$ 7.6	\$ 7.6	\$ 7.6	\$ 7.6	\$ 7.6	\$ 7.6	\$ 7.6
Unfunded Contribution	4.4	4.1	4.3	4.9	9.4	10.8	12.3	13.8	15.4	15.9	16.4	16.9	17.4			
Net Employer Contribution	\$ 11.6	\$ 10.5	\$ 10.5	\$ 11.3	\$ 16.7	\$ 18.2	\$ 19.8	\$ 21.4	\$ 23.0	\$ 23.5	\$ 24.0	\$ 24.5	\$ 25.0			
Projected Payroll	\$ 68.5	\$ 61.9	\$ 58.7	\$ 59.4	\$ 60.8	\$ 62.1	\$ 63.9	\$ 65.3	\$ 66.7	\$ 68.2	\$ 69.7	\$ 71.3	\$ 72.9			
Net Normal Cost %	10.55%	10.27%	10.59%	10.73%	12.03%	11.86%	11.73%	11.56%	11.37%	11.18%	10.96%	10.70%	10.43%			
Unfunded Contribution %	6.39%	6.61%	7.35%	8.25%	15.49%	17.40%	19.22%	21.17%	23.15%	23.32%	23.50%	23.68%	23.86%			
Net Employer Contribution %	16.94%	16.88%	17.94%	18.98%	27.52%	29.26%	30.95%	32.73%	34.51%	34.50%	34.46%	34.38%	34.29%			



## Miscellaneous Plan, Without Hardship Exemption

(\$ in million)

### Reflects the following changes for the 2015/2016 fiscal year:

- \* Change in smoothing method/amortization approach
- \* Decrease in discount rate from 7.50% to 7.25%
- \* Fully generational mortality tables
- \* Preliminary market return of 12.5% for FYE 6/30/2013
- \* 5 records assistants added by FYE 2017 via Marshall Plan

Valuation Date	06/30/2022	06/30/2023	06/30/2024	06/30/2025	06/30/2026	06/30/2027	06/30/2028	06/30/2029	06/30/2030	06/30/2031	06/30/2032	06/30/2033	06/30/2034	06/30/2036	06/30/2037
Contribution for Fiscal Year	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030	2030/2031	2031/2032	2032/2033	2033/2034	2034/2035	2035/2036	2036/2037		
Net Normal Cost	\$ 7.6	\$ 7.6	\$ 7.6	\$ 7.6	\$ 7.6	\$ 7.6	\$ 7.6	\$ 7.7	\$ 7.8	\$ 7.8	\$ 7.9	\$ 8.0	\$ 8.2		
Unfunded Contribution	17.9	16.4	16.9	17.4	18.0	18.5	19.1	17.9	18.5	18.3	18.8	13.3	13.7		
Net Employer Contribution	\$ 25.5	\$ 24.0	\$ 24.5	\$ 25.0	\$ 25.5	\$ 26.1	\$ 26.7	\$ 25.6	\$ 26.2	\$ 26.1	\$ 26.8	\$ 21.3	\$ 21.9		
Projected Payroll	\$ 74.6	\$ 76.4	\$ 78.3	\$ 80.3	\$ 82.3	\$ 84.5	\$ 86.8	\$ 89.2	\$ 91.8	\$ 94.4	\$ 97.1	\$ 100.0	\$ 103.0		
Net Normal Cost %	10.19%	9.94%	9.69%	9.44%	9.20%	8.99%	8.79%	8.61%	8.46%	8.31%	8.17%	8.05%	7.95%		
Unfunded Contribution %	24.01%	21.52%	21.63%	21.73%	21.82%	21.89%	21.95%	20.10%	20.13%	19.38%	19.40%	13.29%	13.29%		
Net Employer Contribution %	34.19%	31.46%	31.32%	31.17%	31.02%	30.88%	30.74%	28.71%	28.59%	27.69%	27.57%	21.34%	21.24%		

## Miscellaneous Plan, Without Hardship Exemption

(\$ in million)

### Reflects the following changes for the 2015/2016 fiscal year:

- \* Change in smoothing method/amortization approach
- \* Decrease in discount rate from 7.50% to 7.25%
- \* Fully generational mortality tables
- \* Preliminary market return of 12.5% for FYE 6/30/2013
- \* 5 records assistants added by FYE 2017 via Marshall Plan

Valuation Date Contribution for Fiscal Year	06/30/2035 2037/2038	06/30/2036 2038/2039	06/30/2037 2039/2040	06/30/2038 2040/2041	06/30/2039 2041/2042	06/30/2040 2042/2043	06/30/2041 2043/2044	06/30/2042 2044/2045	06/30/2043 2045/2046	06/30/2044 2046/2047	06/30/2045 2047/2048	06/30/2046 2048/2049	06/30/2047 2049/2050
Net Normal Cost	\$ 8.3	\$ 8.5	\$ 8.7	\$ 8.9	\$ 9.2	\$ 9.4	\$ 9.7	\$ 10.0	\$ 10.3	\$ 10.6	\$ 10.9	\$ 11.3	\$ 11.6
Unfunded Contribution	14.1	14.5	15.0	15.4	11.3	10.3	8.6	2.5	-	-	-	-	-
Net Employer Contribution	\$ 22.4	\$ 23.0	\$ 23.7	\$ 24.3	\$ 20.4	\$ 19.7	\$ 18.3	\$ 12.6	\$ 10.3	\$ 10.6	\$ 10.9	\$ 11.3	\$ 11.6
Projected Payroll	\$ 106.0	\$ 109.2	\$ 112.5	\$ 115.9	\$ 119.4	\$ 123.0	\$ 126.7	\$ 130.5	\$ 134.5	\$ 138.5	\$ 142.7	\$ 147.0	\$ 151.4
Net Normal Cost %	7.87%	7.80%	7.75%	7.70%	7.67%	7.67%	7.67%	7.67%	7.67%	7.67%	7.67%	7.67%	7.67%
Unfunded Contribution %	13.29%	13.29%	13.29%	13.29%	9.44%	8.34%	6.80%	1.94%	0.00%	0.00%	0.00%	0.00%	0.00%
Net Employer Contribution %	21.16%	21.09%	21.04%	20.99%	17.11%	16.02%	14.47%	9.62%	7.67%	7.67%	7.67%	7.67%	7.67%

# Exhibit Q

**Summary of Chapter 9 Restructuring Savings  
(FY13-41, in Millions)**

	General Fund	Other Funds	All Funds Total	% of Total
Labor	\$167.0	\$106.9	\$273.9	25%
Retirees	263.0	189.7	452.6	41%
Debt	326.3	0.0	326.3	30%
Other	38.2	0.0	38.2	4%
Totals	794.4	296.6	1,091.0	100%
Labor Prior Claims	25.4	16.8	42.1	
	<u>819.8</u>	<u>313.4</u>	<u>1,133.2</u>	
% of Total	72%	28%	100%	

\*Liability through end of contracts; excludes future year impact of reductions made prior to AB 506 not included in baseline budget forecast.

**Estimated City of Stockton Judgments Payable Every Six Months If Budgeted  
Restructuring Savings Under Chapter 9 Are Lost (FY13-41, \$ in Millions)\***

	General Fund			Other Funds**			Grand Total		
Fiscal Year	Jul 1	Jan 1	FY Total	Jul 1	Jan 1	FY Total	Jul 1	Jan 1	FY Total
12-13	12.5	12.5	25.1	3.7	3.7	7.4	16.2	16.2	32.4
13-14	14.7	14.7	29.4	4.7	4.7	9.4	19.4	19.4	38.8
14-15	15.0	15.0	29.9	4.8	4.8	9.5	19.7	19.7	39.4
15-16	15.1	15.1	30.3	4.8	4.8	9.7	20.0	20.0	39.9
16-17	15.3	15.3	30.5	4.9	4.9	9.8	20.2	20.2	40.3
17-18	14.7	14.7	29.5	5.1	5.1	10.2	19.9	19.9	39.7
18-19	14.6	14.6	29.1	5.2	5.2	10.4	19.8	19.8	39.5
19-20	14.6	14.6	29.3	5.2	5.2	10.5	19.9	19.9	39.8
20-21	14.7	14.7	29.4	5.3	5.3	10.6	20.0	20.0	40.0
21-22	15.0	15.0	30.0	5.3	5.3	10.7	20.3	20.3	40.7
22-23	14.3	14.3	28.5	5.3	5.3	10.6	19.5	19.5	39.1
23-24	14.2	14.2	28.5	5.3	5.3	10.6	19.5	19.5	39.0
24-25	14.3	14.3	28.5	5.3	5.3	10.5	19.5	19.5	39.0
25-26	13.7	13.7	27.5	5.3	5.3	10.6	19.0	19.0	38.1
26-27	13.7	13.7	27.4	5.3	5.3	10.6	19.0	19.0	38.0
27-28	13.6	13.6	27.3	5.2	5.2	10.4	18.9	18.9	37.7
28-29	13.7	13.7	27.4	5.2	5.2	10.4	18.9	18.9	37.8
29-30	13.8	13.8	27.6	5.2	5.2	10.5	19.1	19.1	38.1
30-31	13.9	13.9	27.8	5.3	5.3	10.5	19.2	19.2	38.3
31-32	14.0	14.0	28.0	5.3	5.3	10.6	19.3	19.3	38.5
32-33	14.1	14.1	28.1	5.3	5.3	10.6	19.3	19.3	38.7
33-34	14.1	14.1	28.3	5.3	5.3	10.6	19.4	19.4	38.9
34-35	14.2	14.2	28.4	5.3	5.3	10.6	19.5	19.5	38.9
35-36	14.2	14.2	28.4	5.3	5.3	10.5	19.5	19.5	39.0
36-37	14.2	14.2	28.5	5.2	5.2	10.5	19.5	19.5	38.9
37-38	14.8	14.8	29.6	5.2	5.2	10.4	20.0	20.0	40.0
38-39	9.9	9.9	19.9	5.1	5.1	10.2	15.1	15.1	30.1
39-40	8.4	8.4	16.9	5.0	5.0	10.1	13.5	13.5	26.9
40-41	7.8	7.8	15.5	5.0	5.0	9.9	12.7	12.7	25.4
	<u>397.2</u>	<u>397.2</u>	<u>794.4</u>	<u>148.3</u>	<u>148.3</u>	<u>296.6</u>	<u>545.5</u>	<u>545.5</u>	<u>1,091.0</u>

\*Excludes prior Labor claims

\*\*Other funds' share of labor and retiree medical savings that would be lost

# Exhibit R



**The New York Times** | <http://nyti.ms/Qu5fHA>

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# In a Hole, Golf Considers Digging a Wider One

By **BILL PENNINGTON** APRIL 18, 2014

GREENSBORO, Ga. — Golf holes the size of pizzas. Soccer balls on the back nine. A mulligan on every hole.

These are some of the measures — some would say gimmicks — that golf courses across the country have experimented with to stop people from quitting the game.

Golf has always reveled in its standards and rich tradition. But increasingly a victim of its own image and hidebound ways, golf has lost five million players in the last decade, according to the National Golf Foundation, with 20 percent of the existing 25 million golfers apt to quit in the next few years.

People under 35 have especially spurned the game, saying it takes too long to play, is too difficult to learn and has too many tiresome rules.

Many of golf's leaders are so convinced the sport is in danger of following the baby boomer generation into the grave that an internal rebellion has led to alternative forms of golf with new equipment, new rules and radical changes to courses. The goal is to alter the game's

reputation in order to recruit lapsed golfers and a younger demographic.

“We’ve got to stop scaring people away from golf by telling them that there is only one way to play the game and it includes these specific guidelines,” said Ted Bishop, the president of the P.G.A. of America, who also owns a large Indiana golf complex. “We’ve got to offer more forms of golf for people to try. We have to do something to get them into the fold, and then maybe they’ll have this idea it’s supposed to be fun.”

Among the unconventional types of golf is an entry-level version in which the holes are 15 inches wide, about four times the width of a standard hole.

A 15-inch-hole event was held here at the Reynolds Plantation resort on Monday. It featured the top professional golfers Sergio García and Justin Rose, the defending United States Open champion.

“A 15-inch hole could help junior golfers, beginning golfers and older golfers score better, play faster and like golf more,” said Mr. García, who shot a six-under-par 30 for nine holes in the exhibition.

Mr. Rose said he was planning to use an expanded hole to reintroduce the game to his 5-year-old son, who rejected the game recently after he had tired of failing at it.

“Lately, I’ve been having a hard time getting him to pick up a club,” Mr. Rose said.

Another alternative is foot golf, in which players kick a soccer ball from the tee to an oversize hole, counting their kicks. Other changes relax the rules and allow do-over shots, or mulligans, once a hole; teeing up the ball for each shot; and throwing a ball out of a sand bunker once or twice a round.

Still other advocates of change have focused on adapting to the busy schedules of parents and families. In recent years, golf courses have encouraged people to think of golf in six-hole or nine-hole increments. Soon, about 30 golf courses across the country will become test cases for a system of punch-in-punch-out time clocks that assess a fee by the minutes spent playing or practicing rather than by 18- or 9-hole rounds.

The initiatives are being driven by disparate entities within the game, including the venerable P.G.A. of America, which represents more than 27,000 golf professionals. The organization has created an eclectic, 10-person task force to foster nontraditional pathways to golf. The task force has some golf insiders, but it also includes Arlen Kantarian, who led American tennis's successful effort to reverse a decline in participation, and the Olympic ski champion Bode Miller, whose sport was revived by better equipment and cultural changes that tempered skiing's reputation for stodgy elitism.

"Little League baseball is an example of how to introduce someone to a game with different equipment than the sophisticated players use," Mr. Kantarian said. "We should also be thinking about unconventional golf on school fields or backyards. That might be the best way for kids and beginners to learn anyway."

Mr. Miller said he wanted to lift the rules governing the use of juiced golf clubs or golf balls.

"A nonconforming club or ball does not corrupt the game," Mr. Miller said. "Not if it encourages people to try a very intimidating game. That will be beneficial to golf for 50 years."

Golf still ranks among the nation's top 10 recreational sports activities, and given its traditions, it is no surprise that not everyone agrees with the burgeoning alternative movement.

"I don't want to rig the game and cheapen it," said Curtis Strange, a two-time United States Open champion and an analyst for ESPN. "I don't like any of that stuff. And it's not going to happen either. It's all talk."

Now pros and hackers alike are under the same umbrella regarding rules of the game and equipment. Proponents of unconventional golf are proposing two games — or 10 or 20. That is something the United States Golf Association, golf's governing body, has long avoided.

"We think the charm of the game is a single set of rules," said Thomas J. O'Toole Jr., the U.S.G.A. president. "But we applaud strategic thinking that brings people to golf. We shouldn't be narrow-minded."



Mr. O'Toole said alternative ideas were "not golf as we know it," but he said he believed they were a way for people "to embrace the game so they would ultimately come play golf."

Some golf insiders, like Mark King, the chief executive of TaylorMade-Adidas Golf, have lost patience with the glacial pace of change. Mr. King's company created a website, HackGolf.org, to generate ideas about how to make golf more fun for everyone.

"We needed to spark a revolution, and right now we have 1,500 legitimate ideas — everything from 'Serve free beer' to practical things that will actually work," said Mr. King, who is also on the P.G.A. task force. "The next step will be to prototype real-world experiments and see what happens."

An enthusiastic supporter of the 15-inch hole, Mr. King installed oversize holes at a country club near his company's Southern California headquarters and found that they reduced the length of an 18-hole round to three and a half hours, about an hour less than typical. Most golfers saw a 10-stroke improvement in their scores.

In the next month, TaylorMade-Adidas Golf will subsidize the installation of 15-inch holes at about 100 golf courses so the results can be assessed. (A special hole-cutting device costs about \$250.) The bigger holes might be especially appropriate for corporate and charity golf outings, which often attract novice golfers.

"No one is trying to drive away the many millions of people who play traditional golf," Mr. King said. "But what harm is there in offering an alternative? In five years I bet that 90 percent of golf facilities are having events with the 15-inch hole."

The former L.P.G.A. star Dottie Pepper, one of two women on the P.G.A. task force, said she hoped that the coming changes would soften golf's image enough that it would be more inclusive of women, who are also quitting the game.

"Women feel isolated on the golf course, so we have to encourage them to make it a group thing," Ms. Pepper said. "Build a social

experience. That's what men do."

The budding rebellion also includes changes to gear and equipment. Polara, a nonconforming golf ball engineered to neither slice nor hook, was introduced in 2011 and is sold in 800 retail locations nationwide and online, according to the company's founder, Dave Felker. The company also helped create the United States Recreational Golf Association, whose rules and ethos represented what Mr. Felker called "regular golfers," as opposed to those who play competitively.

Some purists may worry that the peaceful, fundamental golf experience will be replaced by hordes in tank tops feverishly speeding around the links, throwing the ball from hole to hole and booting soccer balls through the bunkers.

"That's the kind of mentality that has held the sport back for 20 years," said Mr. Bishop, the P.G.A. of America president. "I went to a golf club's 125th anniversary dinner not long ago, and the overwhelming majority of the people in the room were over 55. We should be asking, 'On that club's 150th anniversary, who's going to attend?' "

A version of this article appears in print on April 19, 2014, on page A1 of the New York edition with the headline: In a Hole, Golf Considers Digging a Wider One.